Perley Pond Focus Area

Sebago, Maine

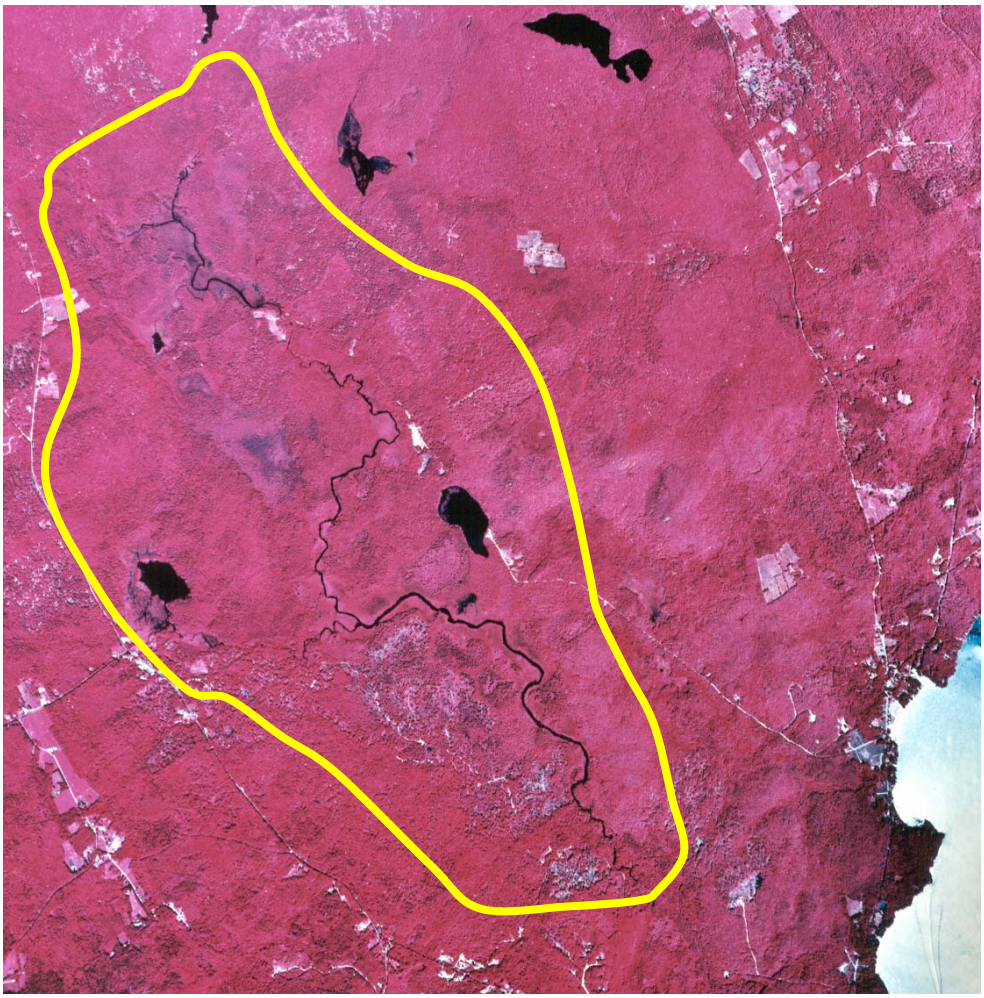
Description:

The Perley Pond Focus Area includes most of the Northwest River and its tributaries from Peabody Pond southward. It is roughly bordered on the west side by Rte. 107. Folley Road, a secondary road, bisects the focus area into southern and northern sections. Prominent features include Perley Pond, Mariner Pond, Mariner Mountain and the large peatland ecosystem along the Northwest River. Most of the focus area consists of a lowland basin, but it includes some steep slopes on its eastern margin including one that abuts Perley Pond. Most of the upland forests are intact except for recent selective cutting in the lowlands west of the Northwest River in the southwestern section of the focus area.

Unpatterned Fen (from MNAP files)

Significant features that have been documented from the focus area include two rare damselflies, one historic rare plant, and one exemplary ecosystem. Additionally, the area includes extensive waterfowl and wading bird habitat.

A high quality **unpatterned fen ecosystem**, which occupies more than 600 acres, has been documented along the shores of Perley Pond and the Northwest River. This acidic peatland ecosystem occurs in deposits of glacio-fluvial sand and gravel. Ground or surface water from adjacent uplands provides some nutrient input into this system. The ecosystem encompasses a wide variety of natural communities including sedge-leatherleaf fen lawn, dwarf shrub bog, spruce-larch wooded bog, red maple wooded swamp, sweetgale mixed shrub fen, and tussock sedge meadow. Dwarf shrub bog is the most abundant of these community types within the ecosystem. Overall, the flora is highly diverse given the moderate size and acidic conditions of



Infrared Aerial Photograph of Perley Pond Focus Area (1991)

the wetland complex. This is a high quality example of an unpatterned fen because of its excellent condition and high floristic diversity. The entire peatland ecosystem and additional streamside wetlands are designated as wading bird and waterfowl habitat by the Department of Inland Fisheries and Wildlife.

Descriptions of other significant features:

Two globally rare damselflies, the **pine barrens bluet** and the **New England bluet**, have both been documented from within the focus area. Both species inhabit sandy acidic pondshores with emergent vegetation. **Smooth winterberry holly**, a rare plant, has been documented historically from the shores of Perley Pond. The last observation of this plant at this site, however, was in 1916.

Special Natural FeaturesTable for Perley Pond Focus Area:

Common Name	Scientific Name	Status	S-Rank	G-Rank
Natural Communities				
Unpatterned Fen Ecosystem	Unpatterned Fen Ecosystem	n/a	S4	N/a
Rare Plants				
Smooth winterberry holly (historic -- last observed 1916)	*Ilex laevigata*	n/a	S2S3	G5
Rare Animals				
Pine barrens bluet	*Enallagma recurvatum*	SC	S?	G3
New England bluet	*Enallagma laterale*	SC	S1	G3

Other Resources Mapped by MDIFW:
Wading Bird / Waterfowl Habitat

Conservation Considerations :

- The integrity of wetlands and the processes and life forms they support are dependent on the maintenance of the current hydrology of the site. Intensive timber harvesting, vegetation clearing, soil disturbance, new roads, and development on buffering uplands can result in greater runoff, sedimentation, and other non-point sources of pollution. Future management activity should avoid additional impacts to the site's hydrology.
- Less pervasive is degradation from incidental uses related to the increasing residential development in the area. Buffers can play a major role in protection here. Care needs to be taken that ORV's stay on existing trails and remain out of all wetlands when the ground is not frozen. Existing roads and trails should be reviewed with particular recreation and access needs in mind, and trails closed if they run counter to protection needs. Fragmenting features should be minimized where possible.

- Use of heavy machinery for construction, landscaping, plowing, or forestry should be conducted during the winter when vulnerable animals are in protective locations. Avoid road improvement projects (e.g. paving) that may lead to increased traffic volume and speed within ¼ mile of known damselfly wetlands.
- No activities should be permitted that could lead to the loss or degradation of wetlands including filling, dredging, sedimentation, changing hydrology unless the activity is approved by MDIFW.
- A minimum 250-foot forested buffer zone should be maintained around target wetlands with known damselfly locations. All wetlands, regardless of size, within ¼ mile of mapped damselfly locations should be considered potential habitat, protected from direct impacts, and buffered by forested upland.
- Impervious surfaces, yards, buildings and roads should comprise no more than 20% of the landscape within 1/4 mile of damselfly wetlands. Natural forest habitat should predominate the landscape.
- Towns should strive to maintain important habitat areas identified by MDIFW in low density, rural settings by identifying important habitat areas in comprehensive plans and zoning accordingly.
- Low-intensity cutting (single tree or small group selection, firewood harvest) is likely compatible as long as operators avoid wetlands. Winter harvests are recommended to minimize impacts to rare animals, and wetland condition. Close adherence to Best Management Practices for forestry activities near vernal pools will ensure the protection of wetland habitats.

Protection Status:

The Maine Department of Inland Fisheries and Wildlife owns approximately 88 acres conservation land within the focus area.

STATE RARITY RANKS

S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.

S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.

S3 Rare in Maine (on the order of 20-100 occurrences).

S4 Apparently secure in Maine.

S5 Demonstrably secure in Maine.

Note: **State Ranks** are determined by the Maine Natural Areas Program.

GLOBAL RARITY RANKS

G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.

G2 Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.

G3 Globally rare (on the order of 20-100 occurrences).

G4 Apparently secure globally.

G5 Demonstrably secure globally.

Note: **Global Ranks** are determined by The Nature Conservancy.

STATE LEGAL STATUS FOR PLANTS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's endangered and threatened plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

E ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future, or federally listed as Endangered.

T THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

SC SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.

Visit our web site for more information on rare, threatened and endangered species!
http://www.state.me.us/doc/nrimc/mnap/factsheets/mnapfact.htm